

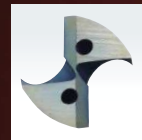


True Circle PCD Reamer

Manmaru Z Reamer

Finish Cutting even in Discontinuous Hole

PAT.3847016

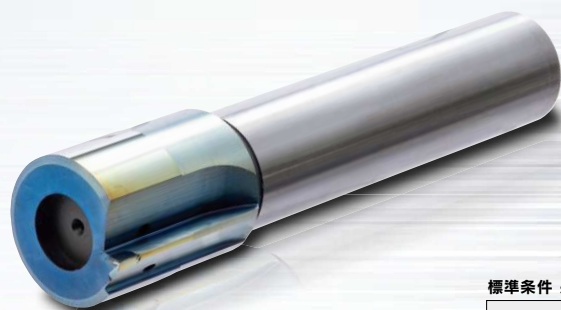


TFH Drill

TFH Drill

High Efficiency Cutting

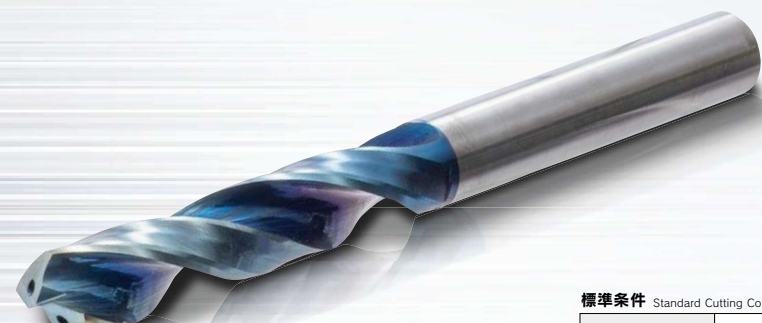
All Round Guide allows for Excellent Circularity & 1 PCD Cutting Edge Leaves a Superior Finish



標準条件 Standard Cutting Condition

切削速度 (m/min) Cutting Speed	50~400
送り (mm/rev) Feed Rate	0.05~0.2

Excellent Twist Drill with Low Resistance Cutting Edge & High Feed Rate

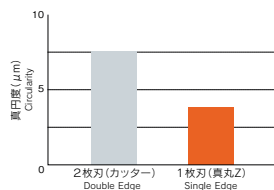


標準条件 Standard Cutting Condition

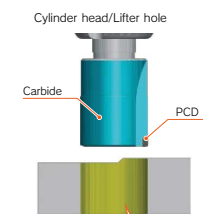
切削速度 (m/min) Cutting Speed	50~250
送り (mm/rev) Feed Rate	0.15D以下 (Max2.0mm/rev)

Point Good Guide performance

Excellent Circularity



Machining example



要求精度 Desired Accuracy

真円度: 7 μm
Circularity
面粗さ: Rz6.3 μm
Roughness
加工径: IT6
Hole Dia.



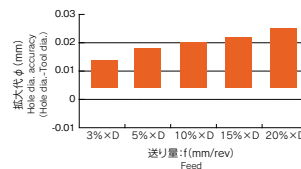
断続 discontinuous

【切削条件】

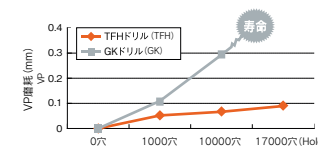
切削速度 Cutting Speed	200m/min
送り Feed Rate	0.2mm/rev
工具径 Tool Dia.	φ30mm
被削材 Work Material	AC4C-T6

Point High Efficiency Cutting Feed: 15% of Drill Dia. ※f=1.5mm/rev (max f=2.0mm/rev)

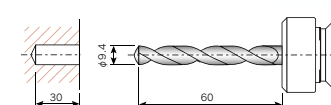
Hole Dia. Accuracy



Tool Life



【加工事例】 Machining example



【切削条件】

切削速度 Cutting Speed	200m/min
送り Feed Rate	図中参照 See Figure
工具径 Tool Dia.	φ9.4mm
被削材 Work Material	AC4C-T6

【切削抵抗(スラスト) Cutting Force

